

DEGREE PROGRAM TITLE: CYBERSECURITY

AFSC: 1B4X1, Cyberspace Defense Operations

PROGRAM GOAL: The goal of the **CCAF Cybersecurity Degree Program** is to prepare graduates for long-term careers as network security professionals in the information technology field. The program prepares students for entry-level employment as network administrators, systems operations analysts, and network security technicians. The program is designed to develop effective leaders of our most valued resource—our people—and cultivate managers of complex systems, processes, and technologies essential to the Air Force and our Nation.

LEARNING OUTCOMES: Upon completion of this program students will be able to:

1. Direct personnel and conduct computer/network attack, defense and exploitation operations.
2. Analyze national defense guidance to develop cyberspace defense plans and tactics, techniques, and procedures.
3. Perform network warfare attack operations on an adversary's communication infrastructure and equipment.
4. Conduct active and passive network defense operations of friendly forces and vital interests from hostile attacks.
5. Participate in research, development, testing and evaluation to determine new capabilities and modifications to existing systems through reverse engineering network nodes and infrastructure devices.
6. Provide preemptive cyber security by identifying dependencies and reduce vulnerabilities before they can be exploited.
7. Perform battle damage assessments and analysis on network hardware and software components by means of applying computer forensics and reverse engineering tactics, techniques, and procedures.